THE FOLLOWING ARE THE ENGLISH TRANSLATION OF ANNEXES TO THE INTERNATIONAL PRELIMINARY EXAMINATION REPORT (ARTICLE 34):

Amended Sheets (Pages 11-12)

We claim:

1. A process for the continuous recirculation of the olefin which has not been reacted in the oxidation of olefins by means of hydroperoxide to give oxiranes and is present in the offgas stream formed during the oxidation, which comprises the steps (i) to (iii)

   (i) separating the olefin from the offgas stream by absorption in a hydrocarbon,
   (ii) desorbing the olefin from the hydrocarbon,
   (iii) recirculating the olefin obtained in step (ii) to the oxidation process.

2. A process as claimed in claim 1, wherein the hydrocarbon obtained after desorption of the olefin in step (ii) is recirculated to step (i).

3. A process as claimed in claim 1 or 2, wherein the hydrocarbon used is tetradecane.

4. A process as claimed in any of claims 1 to 3, wherein the olefin is absorbed at a pressure of from 3 to 6 bar and a temperature of from 5 to 35°C and separated off either in liquid form in a distillation column at a pressure of from 1 to 3 bar or in gaseous form at a pressure of from 1 to 3 bar and a temperature of from 70 to 90°C in a flash evaporation.

5. A process as claimed in any of claims 1 to 4, wherein the offgas stream comprises inert gases and a small amount of oxygen.

6. A process as claimed in claim 5, wherein the offgas stream comprises nitrogen.

7. A process as claimed in any of claims 1 to 6, wherein the offgas stream comprises a mixture of propene and propane.

8. A process as claimed in claim 7, wherein the propene/propane mixture obtained after separation from the hydrocarbon is separated into propene and propane in a C_3 splitter.

9. An apparatus for carrying out a process for the continuous recirculation of the olefin which has not been reacted in the oxidation of olefins by means of hydroperoxide to give oxiranes and is present in the offgas stream formed during the oxidation, wherein the apparatus comprises at least one reactor for preparing the oxirane, at least one absorption and desorption unit for separating off the olefin and a C_3 splitter.